```
     (FILE 'USPAT' ENTERED AT 15:43:07 ON 28 JUN 1999)
L1              QUE DATA (2A) PROTECT?
L2              QUE UTILIZ? OR USE? OR USING
L3              QUE ALLOW? OR PERMI?
L4              QUE JUDG? OR COMPAR?
L5              QUE COPYRIGHT? OR COPY OR COPYING OR DUPLICAT?
L6          398 S L1 (P) L2 (P) L3
L7              QUE FORBID? OR PROHIBIT?
L8           65 S L6 AND L7                    (scanned)
L9              QUE APPEND? OR ATTACH? OR ADD?
L10             QUE APPEND? OR ATTACH? OR ADDING? OR ADDED OR ADDS
L11          55 S L8 AND L10
L12             QUE STOR? OR SAV?
L13          55 S L12 AND L11                  (image search)
                SAVE L13 PROTECTDATA/L
```

ANS: 1

US PAT NO: 5,392,351 [IMAGE AVAILABLE]
DATE ISSUED: Feb. 21, 1995
TITLE: Electronic data protection system
INVENTOR: Takayuki Hasebe, Kawasaki, Japan
Ryota Akiyama, Kawasaki, Japan
Makoto Yoshioka, Kawasaki, Japan
ASSIGNEE: Fujitsu Limited, Kanagawa, Japan (foreign corp.)
APPL-NO: 08/031,339
DATE FILED: Mar. 15, 1993
FRN-PRIOR: Japan 4-058048 Mar. 16, 1992
INT-CL: [6] H04L 9/32
US-CL-ISSUED: 380/4, 25
US-CL-CURRENT: 380/4, 25
SEARCH-FLD: 380/4, 25
REF-CITED:

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4,683,553	7/1987	Mollier	380/4
4,757,534	7/1988	Matyas et al.	380/25
4,850,017	7/1989	Matyas, Jr. et al.	
5,010,571	4/1991	Katznelson	380/4
5,058,162	10/1991	Santon et al.	380/4 X
5,065,429	11/1991	Lang	380/4 X

FOREIGN PATENT DOCUMENTS

0114522	8/1984	European Patent Office
0268139	5/1988	European Patent Office
3-83132	4/1991	Japan
88-02202	3/1988	World Intellectual Property Organization

OTHER PUBLICATIONS

Computer vol. 17, No. 4, (Apr. 1984) Long Beach, Calif., USA; Combatting Software Piracy by Encryption and Key Management.

ART-UNIT: 222
PRIM-EXMR: Gilberto Barron, Jr.
LEGAL-REP: Nikaido, Marmelstein, Murray & Oram

ABSTRACT:
An electronic data protection system for protecting electronic data from illegal copying by a third party, includes: a storage medium for storing an encrypted electronic data, a medium number and encrypted permission information; a vendor computer having a personal key generating unit for generating a medium key based on the medium number, an electronic data decrypting key, and an encrypting unit for encrypting the electronic data decrypting key based on the medium key to generate the encrypted permission information; and a user computer having a personal key generating unit for generating a medium key based on the medium number, a decrypting unit for decrypting the encrypted permission information based on the medium key to generate the electronic data decrypting key which is the same as the electronic data decrypting key of the vendor computer, and a decrypting unit for decrypting the encrypted electronic data based on the electronic data decrypting key to generate a plain text electronic data.

10 Claims, 22 Drawing Figures

ANS: 2

US PAT NO: 5,555,304 [IMAGE AVAILABLE]
DATE ISSUED: Sep. 10, 1996
TITLE: Storage medium for preventing an illegal use by a third

=> d 5392351 5555304 5796824 5917908 ab

US PAT NO: 5,392,351 [IMAGE AVAILABLE] ANS: 1

ABSTRACT:
An electronic data protection system for protecting electronic data from illegal copying by a third party, includes: a storage medium for storing an encrypted electronic data, a medium number and encrypted permission information; a vendor computer having a personal key generating unit for generating a medium key based on the medium number, an electronic data decrypting key, and an encrypting unit for encrypting the electronic data decrypting key based on the medium key to generate the encrypted permission information; and a user computer having a personal key generating unit for generating a medium key based on the medium number, a decrypting unit for decrypting the encrypted permission information based on the medium key to generate the electronic data decrypting key which is the same as the electronic data decrypting key of the vendor computer, and a decrypting unit for decrypting the encrypted electronic data based on the electronic data decrypting key to generate a plain text electronic data.

US PAT NO: 5,555,304 [IMAGE AVAILABLE] ANS: 2

ABSTRACT:
A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

US PAT NO: 5,796,824 [IMAGE AVAILABLE] ANS: 3

ABSTRACT:
A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.
TEXT DATA FOR PATENT 5,917,908 IS NOT AVAILABLE, SEE THE MICROFILE OR PAPER INSTEAD

5761651 ✓
5832083 ✓

part

INVENTOR: Takayuki Hasebe, Kawasaki, Japan
Ryota Akiyama, Kawasaki, Japan
Makoto Yoshioka, Kawasaki, Japan

ASSIGNEE: Fujitsu Limited, Kanagawa, Japan (foreign corp.)
DISCL-DATE: Mar. 15, 2013
APPL-NO: 08/341,176
DATE FILED: Nov. 18, 1994
REL-US-DATA: Division of Ser. No. 31,339, Mar. 15, 1993, Pat. No. 5,392,351.
FRN-PRIOR: Japan 4-058048 Mar. 16, 1992
INT-CL: [6] H04L 9/32; G06F 12/14
US-CL-ISSUED: 380/4, 25
US-CL-CURRENT: 380/4, 25
SEARCH-FLD: 380/4, 25
REF-CITED:

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4,757,534	7/1988	Matyas et al.	380/25
4,785,361	11/1988	Brotby	380/4 X
4,850,017	7/1989	Matyas, Jr. et al.	380/21
4,866,769	9/1989	Karp	380/4 X
5,010,571	4/1991	Katznelson	380/4
5,058,162	10/1991	Santon et al.	380/25
5,065,429	11/1991	Lang	380/25
5,199,066	3/1993	Logan	380/4 X
5,276,735	1/1994	Boebert	380/4 X
5,287,408	2/1994	Samson	380/4 X
5,379,433	1/1995	Yamagishi	380/4 X

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3-83132	4/1991	Japan
WO88/02202	3/1988	World Intellectual Property Organization

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Albert et al., Computer, vol. 17, No. 4, Apr., 1984, Long Beach, California "Combatting Software Piracy by Encryption and Key Management".

ART-UNIT: 222
PRIM-EXMR: Gilberto Barron, Jr.
LEGAL-REP: Nikaido, Marmelstein, Murray & Oram LLP

ABSTRACT:
A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

28 Claims, 23 Drawing Figures

US PAT NO: 5,796,824 [IMAGE AVAILABLE] ANS: 3
DATE ISSUED: Aug. 18, 1998
TITLE: Storage medium for preventing an irregular use by a third party

INVENTOR: Takayuki Hasebe, Kawasaki, Japan
Ryota Akiyama, Kawasaki, Japan
Makoto Yoshioka, Kawasaki, Japan

ASSIGNEE: Fujitsu Limited, Kanagawa, Japan (foreign corp.)
APPL-NO: 08/603,760
DATE FILED: Feb. 20, 1996
REL-US-DATA: Division of Ser. No. 341,176, Nov. 18, 1994, Pat. No.

5,55 04, which is a division of Se lo. 31,339, Mar. 15, 1993, Pat. No. 5,392,351.

FRN-PRIOR: Japan 4-058048 Mar. 16, 1992
INT-CL: [6] H04L 9/32
US-CL-ISSUED: 380/4, 25
US-CL-CURRENT: 380/4, 25
SEARCH-FLD: 380/4, 25
REF-CITED:

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5,065,429	11/1991	Lang
5,199,066	3/1993	Logan
5,276,735	1/1994	Boebert et al.
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5,379,433	1/1995	Yamagishi

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3-83132	4/1991	Japan
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OTHER PUBLICATIONS

Albert et al., Computer, vol. 17, No. 4, Apr., 1984, Long Beach, California, "Combatting Software Piracy by Encryption and Key Management".

ART-UNIT: 222
PRIM-EXMR: Gilberto Barron, Jr.
LEGAL-REP: Nikaido Marmelstein Murray & Oram LLP

ABSTRACT:
A storage medium stores encrypted electronic data, a medium personal number which is unique for each storage medium and encrypted permission information. At least the medium personal number is written onto the storage medium in an un-rewritable form which a user computer cannot rewrite.

16 Claims, 23 Drawing Figures

ANS: 4

US PAT NO: 5,832,083 [IMAGE AVAILABLE]
DATE ISSUED: Nov. 3, 1998
TITLE: Method and device for utilizing data content
INVENTOR: Noboru Iwayama, Kawasaki, Japan
Naoya Torii, Kawasaki, Japan
Takayuki Hasebe, Kawasaki, Japan
Masahiko Takenaka, Kawasaki, Japan
Masahiro Matsuda, Kawasaki, Japan
ASSIGNEE: Fujitsu Limited, Kawasaki, Japan (foreign corp.)
APPL-NO: 08/509,285
DATE FILED: Jul. 31, 1995
FRN-PRIOR: Japan 6-252623 Sep. 9, 1994
INT-CL: [6] H04K 1/00
US-CL-ISSUED: 380/4, 25
US-CL-CURRENT: 380/4, 25
SEARCH-FLD: 380/4, 25, 21
REF-CITED:

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4,247,106	1/1	Jeffers et al.
4,439,670	3/1[redacted]4	Bassett et al.
4,446,519	5/1[redacted]	Thomas
4,484,217	11/1984	Block et al.
4,558,176	12/1985	Arnold et al.
4,590,557	5/1986	Lillie
4,646,234	2/1987	Tolman et al.
4,649,510	3/1987	Schmidt
4,654,799	3/1987	Ogaki et al.
4,658,093	4/1987	Hellman
4,672,554	6/1987	Ogaki
4,674,055	6/1987	Ogaki et al.
4,740,890	4/1988	William
4,780,905	10/1988	Cruts et al.
4,787,050	11/1988	Suzuki
4,816,653	3/1989	Anderl et al.
4,816,654	3/1989	Anderl et al.
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4,864,516	9/1989	Gaither et al.
4,879,645	11/1989	Tamada et al.
4,949,257	8/1990	Orbach
4,999,806	3/1991	Chernow et al.
5,006,849	4/1991	Baarman et al.
5,008,814	4/1991	Mathur
5,014,234	5/1991	Edwards, Jr.
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5,051,822	9/1991	Rhoades
5,056,009	10/1991	Mizuta
5,103,392	4/1992	Mori
5,103,476	4/1992	Waite et al.
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5,214,697	5/1993	Saito
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5,245,330	9/1993	Wassink
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Japanese Patent Laid-Open Publication No. 57-127249, Aug. 7, 1982 (equivalent to Japanese patent Publication No. 61-22815).
Japanese Patent Laid-Open Publication No. 5-89363, Apr. 9, 1993.
Japanese Patent Laid-Open Publication No. 5-266575, Oct. 15, 1993.
Japanese Patent Laid-Open Publication No. 5-298085, Nov. 12, 1993.
Japanese Patent Laid-Open Publication No. 6-95871, Apr. 8, 1994.

ART-UNIT: 222
PRIM-EXMR: David G. Cain
LEGAL-REP: Staas & Halsey

ABSTRACT:
The present invention provides a data content utilizing device having data storing section for storing information obtained by encoding data contents and content identification information specifying the data contents, a utilization permitting device for generating utilization permission information used to decode data contents desired by a user and information converting section for loading data contents requested by the user from the data storing section and decoding the data contents only in the case where utilization permission information is generated by the utilization permitting device.

43 Claims, 21 Drawing Figures

US PAT NO: 5,761,651 [IMAGE AVAILABLE] ANS: 5
DATE ISSUED: Jun. 2, 1998
TITLE: Software charging system and software data utilization

perm ing device

INVENTOR: Takayuk[illegible] Hasebe, Kawasaki, Japan
Naoya T[illegible]ii, Kawasaki, Japan
Noboru Iwayama, Kawasaki, Japan
Masahiko Takenaka, Kawasaki, Japan
Masahiro Matsuda, Kawasaki, Japan

ASSIGNEE: Fujitsu Limited, Kawasaki, Japan (foreign corp.)

APPL-NO: 08/490,049
DATE FILED: Jun. 13, 1995
FRN-PRIOR: Japan 6-188667 Aug. 10, 1994
INT-CL: [6] G06F 17/60
US-CL-ISSUED: 705/400, 30, 32
US-CL-CURRENT: 705/400, 30, 32
SEARCH-FLD: 194/215, 216, 217; 222/2; 364/400, 401, 406, 464.01, 464.1; 380/4; 395/230, 232

REF-CITED:

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4,658,093	4/1987	Hellman	380/25
4,672,554	6/1987	Ogaki	364/479
4,674,055	6/1987	Ogaki et al.	364/479
4,740,890	4/1988	William	380/4 X
4,780,905	10/1988	Cruts et al.	380/44
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4,816,654	3/1989	Anderl et al.	235/380
4,817,140	3/1989	Chandra et al.	380/4
4,864,516	9/1989	Gaither et al.	395/153
4,879,645	11/1989	Tamada et al.	235/380 X
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5,199,066	3/1993	Logan	380/4
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5-89363	4/1993	Japan
5-266575	10/1993	Japan
5-298058	11/1993	Japan

6-95871 4/ 4 Japan

ART-UNIT: 244
PRIM-EXMR: Edward [redacted] Cosimano
LEGAL-REP: Staas & Halsey

ABSTRACT:
A software charging system includes a utilization permitting device for giving permission to use a software storing medium storing ciphered programs or data (software); and an authorization center capable of communicating with the utilization permitting device for setting a utilizable amount, totalling utilization amounts and charging a user. The utilization permitting device includes: a utilization permission processing part having a clock for obtaining date and time data, and having a date and time data storing unit for storing obtained date and time data until obtaining next data and time data; and a utilization amount managing part for calculating a software utilization amount of an end user. A software utilization amount is managed based on the number of days at the utilization permission processing part.

1. 5,392,351, Feb. 21, 1995, Electronic data protection system; Takayuki Hasebe, et al., 380/4, 25 [IMAGE AVAILABLE]

2. 5,555,304, Sep. 10, 1996, Storage medium for preventing an illegal use by a third party; Takayuki Hasebe, et al., 380/4, 25 [IMAGE AVAILABLE]

3. 5,761,651, Jun. 2, 1998, Software charging system and software data utilization permitting device; Takayuki Hasebe, et al., 705/400, 30, 32 [IMAGE AVAILABLE]

4. 5,832,083, Nov. 3, 1998, Method and device for utilizing data content; Noboru Iwayama, et al., 380/4, 25 [IMAGE AVAILABLE]